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10/589,395

08/15/2006

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25944 7590 10/11/2007  
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EXAMINER

MAHONEY, CHRISTOPHER E

ART UNIT

PAPER NUMBER

2862

MAIL DATE

DELIVERY MODE

10/11/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

### Application No.

10/589,395

### Applicant(s)

OSAWA ET AL.

### Examiner

Christopher E. Mahoney

### Art Unit

2862

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 August 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>AUG 15, 2006</u> . | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Priority***

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the surface of the Fresnel lens having irregularities must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-2, 4-7, and 9-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Hirose (US Pub. 20070159692). Hirose teaches a Fresnel lens sheet for a rear projection screen comprising a Fresnel lens formed on a substrate sheet having a haze value of 70% and a thickness of 2 (mm). This satisfies the equation  $H \geq 3.15T^3 - 23.6T^2 + 63.8T - 20.5$ . Utilizing this equation results in  $70 \geq 37.9$ . Alternatively, Hirose discloses a Fresnel lens sheet containing particles which has a haze or 65% and a thickness of 2mm. This also satisfies the above equation resulting in  $65 > 37.9$ . The applicant is directed to review paragraphs 46 and 49.

Claims 1-2, 4-7, and 9-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Sakaguchi (US Pub. 20050213208). Sakaguchi teaches a Fresnel lens sheet for a rear projection screen comprising a Fresnel lens formed on a substrate sheet having a haze value of 90% and a thickness of (mm). This satisfies the equation

$H \geq 3.15T^3 - 23.6T^2 + 63.8T - 20.5$ . Utilizing this equation results in  $90 \geq 22.85$ . Alternatively,

Sakaguchi discloses a Fresnel lens sheet containing particles which has a haze or 70% and a

Art Unit: 2862

thickness of 2mm. This also satisfies the above equation resulting in  $70 > 37.9$ . The applicant is directed to review paragraphs 46 and 53 as well as figures 1 and 9.

Claims 1-2, 4-7, and 9-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Goto (U.S. Pat. No. 6,836,363). Goto teaches a Fresnel lens sheet for a rear projection screen comprising a Fresnel lens formed on a substrate sheet having a haze value of 25% and a thickness of (mm). This satisfies the equation  $H \geq 3.15T^3 - 23.6T^2 + 63.8T - 20.5$ . Utilizing this equation results in  $25 \geq 5.89$ . The applicant is directed to review col. 7, lines 55-65.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirose (US Pub. 20070159692) in view of Plummer (U.S. Pat. No. 3,718,078). Hirose teaches the salient features of the claimed invention except for the surface of the Fresnel lens having irregularities. Plummer teaches in figures 4-5 that it was known to utilize a Fresnel lens having irregularities. It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the features taught by Plummer for the purpose of improved diffusion.

Claims 3 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakaguchi (US Pub. 20050213208) in view of Plummer (U.S. Pat. No. 3,718,078). Sakaguchi teaches the salient features of the claimed invention except for the surface of the Fresnel lens having

Art Unit: 2862

irregularities. Plummer teaches in figures 4-5 that it was known to utilize a Fresnel lens having irregularities. It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the features taught by Plummer for the purpose of improved diffusion.

Claims 3 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goto (U.S. Pat. No. 6,836,363) in view of Plummer (U.S. Pat. No. 3,718,078). Goto teaches the salient features of the claimed invention except for the surface of the Fresnel lens having irregularities. Plummer teaches in figures 4-5 that it was known to utilize a Fresnel lens having irregularities. It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the features taught by Plummer for the purpose of improved diffusion.

#### *Conclusion*

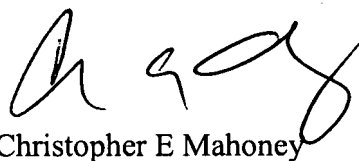
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher E. Mahoney whose telephone number is (571) 272-2122. The examiner can normally be reached on 8:30AM-5PM, Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Assouad can be reached on (571) 272-2210. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2862

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read 'Ch Mahoney', is written over the printed name.

Christopher E Mahoney  
Primary Examiner  
Art Unit 2862